Pusat Pengajian Ekonomi, Kewangan dan Perbankan
Universiti Utara Malaysia

ACDEC
ASEAN Consortium on Department of Economics Conference

ACDEC Proceedings 2015

ISBN 978-983-43720-4-0

Capacity of Profit and Selling in Planned Farming at Malaysia

Noraniza Yusoff[a*]

[a]Senior Lecturer, School of Government, UUM College of Law,
Government and International Studies (UUM COLGIS), 06010
UUM Sintok, Kedah Darul Aman, Malaysia

Abstract

Written works propose that encouraging effects from contract farming namely technology changes can be restrained by elimination of competition by the contracting venture. It might be excessively optimistic to predict contract farming for encouraging business agriculture and to permit the development of ambitious growers and markets. Income is the essential reason for company to engage farmers' groups. Omit to gain the aspired profit could put at risk their engagement in such organizations. During the time that resolving growers earning by producing facilities at cheaper expense and stronger prices for their products, the predicted role of grower entities could be challenged by numerous issues namely insufficient facilities, deficiency of investment, scarce facility allocation, insufficient expansion facilities, competition with local merchants and so forth. The objective of this study was examined capacity of profit and merchandise in contract farming in Malaysia. Quantitative method used to collect data and analyze data. Linear regression analysis had performed to answer the hypothesis and research question. The result show that growers' profit in 2013, 2012, and 2009 has correlation with growers' merchandise in 2013, 2012 and 2009. The regression model statistically predicts the profits. This study confirms that merchandise may predict growers' profit.

Keywords: capacity; farming; selling; Malaysia; planned.

* Corresponding author's e-mail address: noraniza@uum.edu.my.

1. Introduction

Literature works propose that promoting impacts from contract farming specifically technology shifts can be controlled by removal of competition by the contracting enterprise. It might be enormous optimistic to forecast contract farming for promoting business agricultural and to allow the advancement of vigorous farmers and markets. Revenue is the vital cause for company to involve growers' groups. Exclude to acquire the desired strongly profit could put at threat their participation in such organizations. Throughout the time that solving farmers gaining by growing amenities at low-cost and more stable values for their products, the forecasted function of farmer bodies could be challenged by several problems specifically inadequate amenities, investment, facility allocation, expansion facilities, competition with local sellers and so forth (Smalley, 2013).

There has been regenerated concern in the exercises of the Asian Green Revolution and regenerated government assist for material promotion advertises and subsidies (Nin-Pratt and McBride, 2014). Since the earliest situations and improvement plans were very dissimilar throughout nations in the territory, production developed very variously throughout nations (Swinnen et al, 2015). In 2012, food unsafe is nevertheless a main worldwide interest since 1 billion populations are be affected from food deprivation, deficiency of nutrients, lack of food and the Food and Agriculture Organization of the United Nations (FAO) has determined that human are nevertheless faraway from achieving millennium development goal (MDG) number one comprising to bisect severe poverty and malnutrition by 2015. The main reason of food safety is insufficient food productivity. The FAO revealed its assessments regarding the amount of population be affected from starvation in 2010 approximately 925 million. This amount was less than the 1,020 billion in 2009; nevertheless it was greater than the amount achieved earlier the 2008 worldwide food critical situation. The 2010 amount was consistent to 13.5 percent of the global inhabitants, whereas the 2015 aim MDG number one was 8 percent. The FAO determined that people were nevertheless far from reaching MDG one, which is, dividing equally the amount of starving population global by 2015 (Sasson, 2012).

There has been small endeavor to consider the conceptual association among economic surplus method and the productivity role method. Research cost in an accumulation productivity role can generates technical shift which in turn sources a shift in the productivity process. The similar shift will create a change in the accumulation supply role. Profits to a raise in research cost as calculated by the value marginal output are almost equivalent to the shift in economic surplus related with the rise. The operational types utilized by the majority productivity role investigations implied believe that the resulting supply change is critical variant (Davis, 1981). The full amount marketable surplus can be associated to the possibility for capital generation in a growing economy. The links among the marketable surplus and capital generation have to be obviously understood. The full amount marketable surplus is not equivalent to the saving or investing of the agricultural economy (Krishna, 1965).

The yearly rate of reduce in the share of agricultural in both product and occupation for Malaysia in the year 1960 to 2010 was 2.28 percent per year concerning positions for agricultural product share. In the year 1980 to 2009 rate of decline in the share of agricultural in both product and occupation was 2.85 percent. The product flexibilities were -0.93. Malaysia has profited from growth of the land border across the term. Gross value-added per agriculture employee in sustained $2000 and annualized development for Malaysia in the year 1980 to 2010 were 2,633 for opening value, 6,680 for finale value and 3.2 percent for yearly development. Annualized growth rates of GDP for Malaysia in the year 1970 to 2009 manifests through agriculture GDP (relates to section added land production was 2.94 percent), land production (1.55 percent) and section (1.39 percent) which is section and land production disintegrate agriculture development into development in land section and development in land production. Malaysia's harvest tons per hectare in the year 1970 was 2.4 tons per hectare and in the year 2010 was 3.6 tons per hectare. Between the large Association of Southeast Asian Nations (ASEAN) associate nations, the greatest per capita earnings currently belongs to Malaysia, whose growth program has prioritized agricultural specifically in the initial stage of growth. Finances from extractive businesses were integrated with great state investments largely in small-scale agricultural. From year 1971 to 1995, the share of agricultural and rural growth in full amount of community expenditure was averaged 17 percent. Investing spread to FELDA (the land governing and growth officials), price protection and plantation subsidies. In year 1984, the New Agricultural Policy was invented targeting at growing agro-industry via research, market growth and variation from rice. In 1986, the Industrial Master Plan encouraged downstream agro-processing, concerning on rubber, palm oil, food, timber, other resource-based

business (Briones and Felipe, 2013).

2. Literature Review

The significance of agriculture surplus for the structural complete change added economic development is frequently emphasized by growth economists. Production of investing will be more suitably funded with foreign direct privately credit, share capital, foreign direct investment and growth stocks. Capital-product ratio will be more suitable funded with multilateral credit, national savings, Treasury bill, authorized growth assistant, foreign direct investment and growth stock. Preservation of reliable macroeconomic program that is pro-investing and liability-equitableness switch choice are essential for an agriculture-led economic development. The development of product of any economy relies on capital aggregation and capital aggregation needs investment and an equal volume of national and foreign fund to fit it. Two of the near all significant problem in growth economies and for growing nations is how to encourage investing and how to cause enhancement in the stage of national monetary sources to finance raised investing. Agriculture funding is primarily a growth program in a diversity of means. It encourages agriculture investing and acceptance of technology essential to prompt economic development. The bilateral causality among agriculture development and economic development indicates that agriculture surplus is significant for the structural change added economic development in Nigeria (Obansa and Maduekwe, 2013).

Currently, full amount rural workforce is about 450 million in China, reporting for about 74 percent of the full amount social workforce. In relation to lacking statistics, the present in work time of every rural workforce fewer than 100 days every year, of which around 40 percent is in the unseen unemployment. A great amount of rural surplus labor extremely influenced the development of agriculture production and growers' earning; restrain the well-organized growth of economy and community in urban and rural territory. Thus, subject to the recent condition how efficiently evaluate hundreds of millions of rural surplus labor is of large sensible importance. In the estimation of the agriculture workforce specifications, agriculture program are the major causes to establish the agriculture labor need. In the natural, social, economic, and technical situations, agriculture sources principally productive land has an influential impact on the agriculture labor specifications (Wang et al. 2012).

The inequality among harvest and inhabitant development increases uncertainty concerning how millions of small-scale plantation households will nurture themselves, and how the food arrangement in Sub-Sahara Africa can create sufficient surpluses to nurture the non-agriculture inhabitant. This is specifically the situation as the volume of more productive land that can be because farming remains to decrease and is previously non-existent in several territories. The association among inhabitant concentration, intensification and wellbeing appear from this study. Greater inhabitant concentrations are related with small-scale landholding. At the common landholding size of 1.2 hectare, a raise in inhabitant concentration of 100 individual decline common landholding size by 0.12 hectare which is positively important specified that plantations are particularly small in Malawi. Greater inhabitant concentration initially cause to greater agriculture income rates nevertheless this style inverted at an inhabitant concentration per square kilometer of 257, almost the 70^{th} percentile of the inhabitant concentration distribution in the sample. The concave association may represent that income rates experience bid up at low stages of inhabitant concentration as labor is a somewhat insufficient source. After a particular stage of inhabitant concentration is achieved nevertheless, income rates decrease as labor becomes low-priced compare to land (Ricker-Gilbert et al. 2014).

In the midpoint integration of levels of agriculture growth, Malaysia was portray with medium earning nation, agriculture labor production is $2,800, product share is 20 percent and occupation share is 38 percent. Predictions of agriculture product and occupation shares for 2040 could produce the viewpoint for agriculture change and Malaysia was industrialized nation in term of Timmer's stages. Malaysia will reach the industrialized agricultural position throughout the following three decades (Briones and Felipe, 2013). Nevertheless, following the change from agriculture economy into industry economy, Malaysia is presently balanced to incorporate the knowledge economy. The contribution of the agriculture sector to economic development appears to be unimportant (Hussin and Ching, 2013). In spite of new raised global awareness of the significance of agricultural as a source of revenue, occupation, foreign exchange, tax earnings and its relationship with poverty decrease and the conservation of natural sources, there is nevertheless a demand for enhanced awareness of the significant function that agriculture fund for growth performs in the above problems. Agriculture fund in Sudan is regarded as one of the major causes influencing

food crop productivity (Ahmed et al. 2012). Malaysia reached maintained development of about 6 percent per year development for the past 50 years. Agricultural share of GDP in 2009 has dropped to 7.7 from 33.6 percent in 1970 compared to Nigeria's 55.8 percent in 1970 and 40.3 percent in 2009. Malaysia is a somewhat source affluent economy with its supply of land and has utilized its land for the productivity of tin, rubber and palm oil (Okezie and Amir, 2011).

Malaysia is one of the nations where food self-sufficiency is reducing every year. The deficiency of the Malaysian agriculture sector is that it generally creates cash crops and insufficient food. Malaysia is a network food importing nation in spite of once having generated nearly adequate food for the national inhabitant. It is recorded that there is no land to generate food; it is merely that the priorities are dissimilar. Malaysia is a great expenditure grower of many food outputs for example rice and specific vegetables and still in the area; which does not have the relative benefit in food productivity. Thus planning contributed for several stage of domestic productivity nevertheless not self-sufficiency. The 1998 food import bill of RM10.52 billion is enhanced greater than two-fold and unexpected statistic for little nation as Malaysia. It is particularly great statistic for a nation that has the total forwards been agricultural-based where 35 percent of the full amount land section or 11.63 million hectares is appropriate for agricultural. Malaysia's major imports are cereals, dairy outputs, vegetables and fruits in relation to Statistics Department statistics. In spite of the great food import bill, Malaysia is further a food exporter, generally to its neighbors such as Singapore. There is further the import and re-export of specific foods, for example fresh vegetables. Malaysia major exports are coffee, cocoa, tea and spices accompanied by fish (containing prawns and other seafood) and fish outputs, cereals, rice and fruits. Other Malaysia exports are vegetables, meat, dairy outputs and animal food. In the last 1960s and early 1970s, agriculture sector growth was significant to the whole economic growth of Malaysia. This sector generated to one-third of the Gross Domestic Product (GDP) contributed for partial of the full amount occupation and 50 percent of the foreign exchange incomes (Indrani, 2001).

In the year 1971-1975, Malaysia executed advantages for food self-sufficiency, discovering from the global food critical situation of 1972 to 1973. For paddy, the 90 percent self-sufficiency goal was reconsidered and enhanced to 100 percent. The agricultural sector's contribution to the GDP declined to 22.2 percent in 1980 with the development rate of the sector being 4.3 percent a year. This was due to the worldwide economy declines of 1974 to 1975 and further because of unfavorable climate situations throughout the second half of the decade. Throughout the decade, the farming of fruits and vegetables expended as an outcome of the allocation of subsidies as well as marketing advantages. The acreage for vegetables increased to 9,000 hectares in 1980 (Indrani, 2001). Development in the agriculture sector is important to reaching the Millennium Development Goals associated to poverty and starvation elimination. Whereas these, in their current shape, target to decrease the division of population who experience from starvation by 50 percent among 1990 and 2015, and the division of population in the growing world who became starving from 2005 to 2007 continued steady at 16 percent in spite of important decrease in severe poverty (Rebelo et al. 2014). Nearly all states in Southeast Asia stimulated by the World Bank and others (World Bank, 2009) are inclined regarding the modernization outlook, having witnessed how the four Asian nations (Hong Kong, South Korea, Singapore and Taiwan) quickly developed into very advanced economies via trade and economic liberalization. China has been carefully considered as an economic risk; nearly all Southeast Asian countries accept China's economic function in the area. Generally, economic linked among China and ASEAN are growing extremely (Luo et al. 2011).

In nations for example Laos and Cambodia, reductions have been awarded lacking of environmental and social effect studies, a clear process, consultation with the local population, and numerous times, in means that seemingly disturb existent land laws. The majority small-scale growers in Southeast Asia's less-developed areas involving in livelihood cultivation, a shifting to commercialized cultivation suffers intrinsic threats, for example the likelihood that investors will pull out of the enterprise and cause growers with cash crops and cannot consume or sell at domestic market. The characteristic of contract farming moreover raises the threat that the growers have to experience such as they are not usually remunerated for their labor, which is regarded as investing material by the growers. Specified that the majority of these growers have little savings, not many alternative earnings and poor access to social protections, uncompensated labor can be a main discouragement. For example, poor growers incline to prevent the unsafe but promising rewarding enterprise of tree contract farming. Poor households that participate into such contracts threat damaging cash flow issues due to changing earning and probably to be largely

reliant on credit. Several meet the added threat of being discard their rented land when they are not capable to pay for services charged to them by contractor, or persevere with their liability repayments. Specified the threat disinclination of poor growers all over Southeast Asia, these threats occasionally ascertain to be too much for many poor growers to experience. The more advanced, industrialized nations in Southeast Asia also invest in agriculture productivity in neighboring nations, and are usually careful of participating investments from China, as an inflow of Chinese investments may probably drive up values of agriculture land and sources abroad. For this reason, food safety is a principal priority particularly for network food-importing nations such as Singapore. The island-state is not the merely nation in ASEAN to seek such programs, as some other nations in the area, comprising Malaysia and Indonesia, are also network food-importing. In the uplands of China, Laos, Thailand, Vietnam, Cambodia, and Myanmar, greater than 500,000 hectares of land have been transformed to rubber fields. Contract farming and other shapes of threat would enhance the variety of the domestic economy to produce alternative resources of earning, so as to hinder enormous dependency on revenues from contract farming alone (Luo et al. 2011).

Agricultural is a main cause of economic development, specifically in the initial levels of economic growth. It accounts for great shares of domestic revenue, occupation, and exports and can produce designs of growth that are encouraging for the poor. Nevertheless, the new economic and pricing arrangement remains to influence growers towards intensification of productivity influencing small-scale growers to discontinue their plantations. There are presently almost 500 million growers who farm lower than 2 hectares of land. These small-scale farm holders are largely concentrated in Asia and Africa. The traditional small-scale farm phenomena as identified by little capital material; restricted access to sources; low stages of economic effectiveness; varied agricultural and source usage; and conservative growers who are uneducated, living on the beginning among livelihood and poverty, and experience from an incapability to usage recent technology. Asia solely reports for 87 percent or 435 million of small-scale growers who continuous confront the challenges of environmental degradation and economically incapable productivity arrangements. To concentrate the issue, much of these lands are categorized as damaged lands or lands that have previously experience moderate to severe erosion. There is an economic, environmental, and social commanding to grow more sustainable and various agriculture arrangements in the area and assist small-scale farms to remain running and to do it productive (Malla, 2014).

Two of the main agriculture arrangements have been chooses; upland and rain-fed agriculture arrangement based on the percent of land section considered by these arrangements, agriculture inhabitant relying on them, and common of poverty in the areas with these agriculture arrangements. The upland agriculture arrangements are common in East Asia and Pacific where it engages 19 percent of the full amount land section of the area and is practiced by 27 percent of the full amount agriculture inhabitant. Rains fed agriculture arrangements are common in South Asia. It involves 29 percent of the full amount land section with 30 percent of the full amount agriculture inhabitant relying on it. Although these agriculture arrangements are influential in Asia, they are accomplished at the margins of agriculture production. Sustainable agriculture arrangement in the upland and rain fed agriculture lands is one of the largest challenges in many areas in Asia. These agriculture arrangements are subject to risk and portray clear symptoms of the arising unsustainability of source usage and productivity practices. There is a demand for practices and technologies that are sustainable and produce sources for the foods of the great agriculture inhabitant. Signs of unsustainability are discovered in the form of land damage, soil erosion, water deficiency, decreasing production et cetera which act separately and in coalition to more worsen the fragile and marginal upland. The dynamic nature of agriculture arrangements entails that one choice will not happen in sustainable usage of advocated technologies (Malla, 2014).

3. Methodology

The data used in this study are from research in 2015 on 53 growers involved agriculture program in Malaysia named as *Taman Kekal Pengeluaran Makanan* (TKPM) using quantitative method used to collect data and analyze data. Linear regression analysis had performed to answer the hypothesis and research question (Yusoff, 2015). This paper proposes that selling in farming activity decreases the likelihood of reporting profit. The objective of this study was examined capacity of profit and merchandise in contract farming in Malaysia. This objective is to predict the relationship between merchandise in farming activity and profit. Selling refers to farmers' activity in vegetables

sale such as selling in tomato, chili, water chestnut, sweet potato et cetera in the period from 2009 to 2013. The question is why do some growers report less profit than other growers? Selling in farming activity affects the amount of profit achieved by growers. The independent variable is selling in farming activity and the dependent variable is profit of growers. This paper analyzes the reporting of profit from year 2009 to 2013 of nonprobability sample of growers by questionnaire survey. Intra-class correlation was used to assess the reliability of the instrument involving 2 raters. The intra-class correlation is a calculation of the level to which raters give much the similar scales to each person or object rated. The term intra-class correlation was primarily coined to refer to a calculation of similarity among objects inside some groups or class. In agreement or reliability assessment, the class is the person or object on which substantial scales are made, and it is the uniformity of these scales inside each person or object that is demonstrated by the coefficient. Some variants of the coefficient exist; but, the one most with the biggest inclination to be usage to assess inter-rater agreement is the version that considers dissimilar degree raters chooses for each *ratee*, and dissimilarity in the arrangement of raters and does not need that every *ratee* be rated by every rater. Intra-class correlation analyzes two kinds of forecasted agreement, which are the agreement between one rater and another single rater which categorized as single measure in the output and the agreement among the common raters' scales and the common scales by another, much the same group of raters is categorized as average measures in the output. The single calculation of intra-class correlation represents the agreement among raters and thus how fit an assessment scale established on the scales of one rater probably approves with scales by another rater. The average measures coefficient analysis agreement among commons of scales and is relevant only when assessments average the scales of two or more raters (Graham et al., 2012).

About 47 farmers have been rated in intra-class correlation analysis and the value for the intra-class correlation coefficients consistency of selling is 0.165 and 0.981. The value for the intra-class correlation coefficients agreement of selling is 0.126 and 0.974. The value for the intra-class correlation coefficients consistency of profit is 0.815 and 0.997. The value for the intra-class correlation coefficients agreement of profit is 0.800 and 0.996. Intra-class correlation coefficient (2, 1) of selling in farming activity equals to 0.126. This signifies that intra-class correlation coefficient (2, k), which in this case is intra-class correlation coefficient (2,4) equals to 0.974. Thus, 97.4 percent of the variant in the mean of these raters is real (Landers, 2011). The objective of this paper is to determine the association between selling of farming activity and farmers' profit. This objective tries to explain and predict the association between the dependent and independent variable. Null hypothesis is no significant association between selling in farming activity and farmers' profit. Figure 3.1 below shows the relationship between the independent and dependent variable.

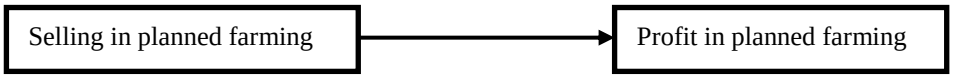

Fig. 1 Relationship between independent variable (selling) and dependent variable (profit) in planned farming

4. Findings and Discussion

Scatter diagram which demonstrated relationship in profit and selling in 2009 to 2013 shows in Figure 1 (a), (b), (c), (d) and (e).

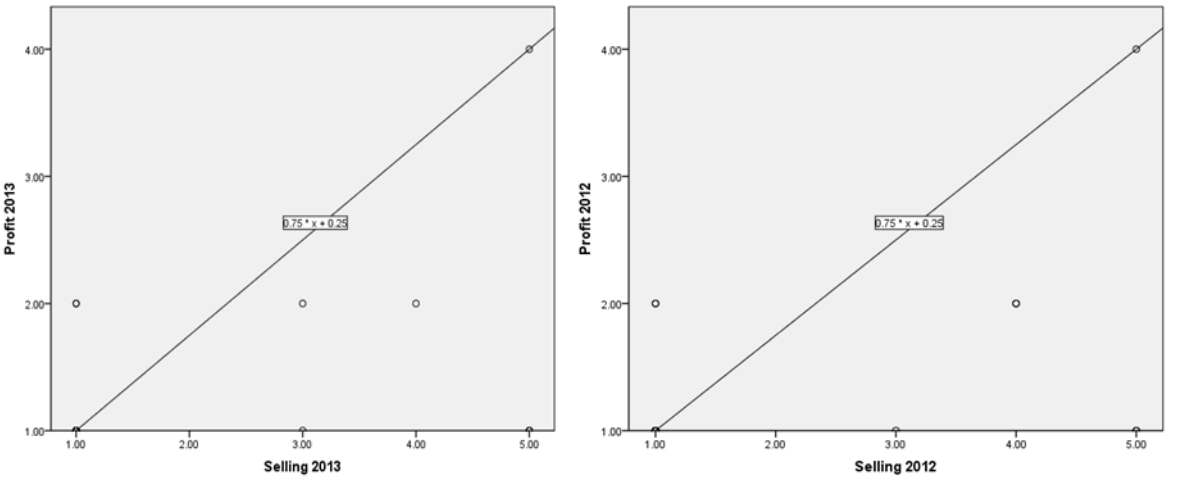

Fig. 1. (a) relationship of profit and selling in farming; (b) relationship of profit and selling in farming in in 2013 2012.

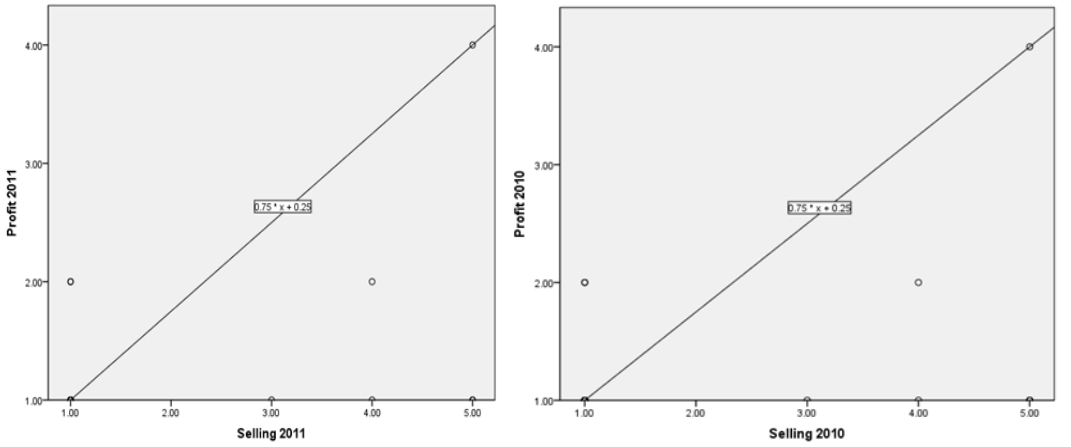

Fig. 1. (c) relationship of profit and selling in farming; (d) relationship of profit and selling in farming in in 2011 2010.

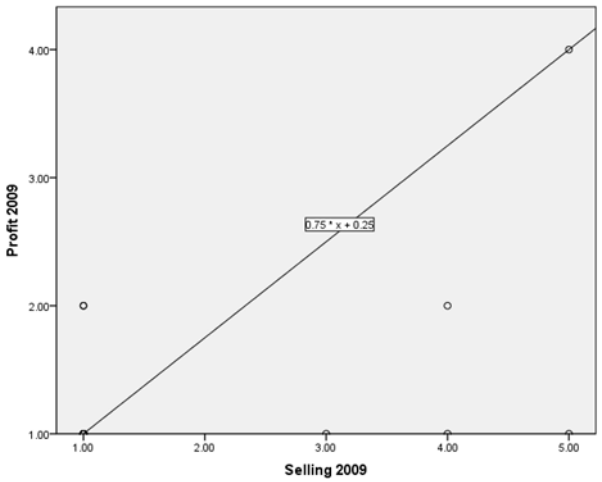

Fig. 1. (e) relationship of profit and selling in farming in 2009

Table 1 shows R an R^2 values. The R values represent the simple correlation and are 0.503 (2009), 0.340 (2010), 0.412 (2011), 0.493 (2012) and 0.411 (2013) which imply moderate degree of correlation. The R^2 values manifest the total variant in the dependent variable, profit, can be demonstrated by the independent variable, selling. In this case, 25.3 percent (2009), 11.5 percent (2010), 17.0 percent (2011), 24.3 percent (2012) and 16.9 percent (2013) can be demonstrated, which are moderate to low (Lund Research Ltd, 2013). The R-squared for 2009 is 0.253 signifies that approximately 25 percent of the variation of profit is accounted for by the model (selling). The t-test for selling 2009 equals 2.536 and is statistically significant interpreting that the regression coefficient for selling 2009 is significantly opposed from zero. The coefficient for selling is 0.249 interpreting that for a one unit raise in selling we would anticipate a 0.2 unit rise in profit. In other words farming with RM1100 cost would be assumed to have profit 20 units greater than farming with RM1000 selling. The constant is 0.846 and this is the forecasted value when selling equals zero. The R-squared for 2012 is 0.243 signifies that approximately 24 percent of the variation of profit is accounted for by the model (selling). The t-test for selling 2012 equals 2.531 and is statistically significant interpreting that the regression coefficient for selling 2012 is significantly opposed from zero. The coefficient for selling is 0.225 interpreting that for a one unit enhance in selling we would anticipate a 0.2 unit raise in profit. In other words farming with RM1100 cost would be assumed to have profit 20 units greater than farming with RM1000 selling. The constant is 0.889 and this is the predicted value when selling equals zero. The R-squared for 2013 is 0.169 signifies that approximately 16 percent of the variation of profit is accounted for by the model (selling). The t-test for selling 2013 equals 2.616 and is statistically significant interpreting that the regression coefficient for selling 2013 is significantly diverse from zero. The coefficient for selling is 0.176 meaning that for a one unit rise in selling we would anticipate a 0.1 unit rise in profit. In other words farming with RM1100 cost would be assumed to have profit 10 units greater than farming with RM1000 selling. The constant is 0.941 and this is the forecasted value when selling equals zero.

Table 1. Model summary

Year	Model	R	R^2	Adjusted R^2	Standard error of the estimate
2009	1	0.503	0.253	0.214	0.63596
2010	1	0.340	0.115	0.071	0.67708
2011	1	0.412	0.170	0.128	0.65594

2012	1	0.493	0.243	0.205	0.63874
2013	1	0.411	0.169	0.133	0.63165

Table 2 shows that the regression model predicts the dependent variable significantly for 2009, 2012 and 2013. F-test is statistically significant for 2009, 2012 and 2013 which the values of F are 6.431 (2009), 6.405 (2012) and 4.671 (2013).

Table 2. ANOVA

Year	**Model**		**Sum of squares**	**df**	**Mean square**	**F**	**Sig.**
2009	1	Regression	2.601	1	2.601	6.431	0.020
		Residual	7.685	19	0.404		
		Total	10.286	20			
2010	1	Regression	1.195	1	1.195	2.607	0.122
		Residual	9.169	20	0.458		
		Total	10.364	21			
2011	1	Regression	1.758	1	1.758	4.087	0.057
		Residual	8.605	20	0.430		
		Total	10.364	21			
2012	1	Regression	2.613	1	2.613	6.405	0.020
		Residual	8.160	20	0.408		
		Total	10.773	21			
2013	1	Regression	1.864	1	1.864	4.671	0.041
		Residual	9.176	23	0.399		
		Total	11.040	24			

Table 3 shows the regression equation as profit 2009 = 0.846 + 0.249 (selling); profit 2012 = 0.889 + 0.225 (selling); and profit 2013 = 0.941 + 0.176 (selling). The selling 2009 ($\beta = 0.249$) is significant ($p = 0.001$) and the coefficient is positive which would indicate that larger selling is related to higher profit. The selling 2012 ($\beta = 0.225$) is significant ($p = 0.001$) and the coefficient is positive which would indicate that larger selling is related to higher profit. The selling 2013 ($\beta = 0.176$) is significant ($p = 0.041$) and the coefficient is positive which would indicate that larger selling is related to higher profit (UC Regents, 2015). From these results it would conclude that lower selling are related to lower profit.

Table 3. Coefficients

Year	**Model**	**Unstandardized coefficients**		**Standardized coefficients**	**t**	**Sig.**
		β	**Standard error**			
2009	1 (Constant)	0.846	0.222		3.812	0.001
	Selling	0.249	0.098	0.503	2.536	0.020
2010	1 (Constant)	0.977	0.233		4.192	0.000
	Selling	0.141	0.088	0.340	1.614	0.122

2011	1	(Constant)	0.921	0.223		4.127	0.001
		Selling	0.184	0.091	0.412	2.022	0.057
2012	1	(Constant)	0.889	0.217		4.092	0.001
		Selling	0.225	0.089	0.493	2.531	0.020
2013	1	(Constant)	0.941	0.201		4.675	0.000
		Selling	0.176	0.082	0.411	2.616	0.041

Differs to Obansa and Maduekwe (2013) which shows the regressions examine the determinants of output development and determinants of financing comparatively. Whereas, this study shows several of the variables were found to be statistically significant. Result shows the association for period 2009, 2012 and 2013 which linear regression predicts the dependent variable. Similar with Bijman (2008) which show that producing and selling on a contractual base is a usual system in agricultural throughout the world. A market-requirement or marketing contract is a pre-harvest agreement among producers and contractors on the terms controlling the sale of the crop or animal. Otherwise time and location of sales, these terms contain the quality of the product thus influencing a few of the productivity decisions of the grower. The contractor decreases the producer's vagueness of locating a market of the yield. Subject to the market-requirement contract the grower sustains most of the decision rights across agriculture activities and thus farm stocks. Contracts are utilized to contribute incentives and fines in order to encourage performance. Lacking appropriate incentives to every contract partner, causes no transaction will occur. Specifically if the contractor needs particular activities from the grower, such as in the case of specific quality, the contract explains the remuneration the grower will receive for these activities. The contract can incorporate an agreement on the value, however it can also imply the value decision instruments will be utilized to determine on the appropriate remuneration. The contract explains the allocation of financial threat such as growers can moderate the threat of earning deprivation due to poor harvest by signing an agreement with a contractor that states an allocation of remuneration independent of achieved harvests. Pultrone (2012) represents similar result which the growers' sale of the output set subject to contract or part of it to a dissimilar purchaser for a greater price or so-called side-selling effecting in lower quantities distributed to the purchaser than those agreed by contract. Similar to Tatlidil and Akturk (2004) which demonstrated that the cost of one kilo of tomato was estimated to be $0.02 whereas selling value of one kilo of tomato, was $0.03 and it was influenced in a profit of $0.01 per kilo in tomato. The percentage of profit to selling value per unit crop was thus 33.30 percent. When the mean of selling value of one kilogram tomato is $0.04, it was influenced the profit per kilo was $0.01 in tomato yield. The percentage of profit to the selling value was discovered to be 25 percent.

5. Conclusion

The study found that selling can predict profits for 2009, 2012 and 2013. The linear regression analysis showed that the relationship between selling and profit for three years. This study suggests increases in knowledge-intensive technologies that enhance scientifically sound decision making at the production stage. This idea represent by Tilman et al. (2002). This can be integrated in physical technology for example apparatus and the produce of cultivated plants diversities or integrated in human being for instance collective pest management. The challenges of spreading information on recent technologies or on successful material utilize and management is extensive specifically in situations where development program are unsuccessful or entirely inadequate. The previous model of science being advanced at the global or possibly national stage and then distributed to growers should substitute by an active exchange of information between scientist and growers.

Acknowledgements

The research is funded by Research Acculturation Grant Scheme (RAGS).

References

Ahmed, E. A., Faki, H. H. M. and Hussein, A. (2012). Role of agricultural finance in producing food crops. *International Journal of Agriculture and Forestry*, 2(2), 10-15.

Bijman, J. (2008). *Contract farming in developing countries: an overview*. Working paper. Retrieved 4 October 2015, from https://www.wageningenur.nl/upload_mm/5/c/b/79333121-6f4b-4f86-9e8e-0a1782e784d6_ReviewContractFarming.pdf

Briones, R. and Felipe, J. (2013). *Agriculture and structural transformation in developing Asia: review and outlook*. ADB Economics Working Paper Series, 363, August 2013.

Davis, J. (1981). The relationship between the economic surplus and production function approaches for estimating ex-post returns to agricultural research. *Review of Marketing and Agricultural Economics*, 49(2).

Graham, M., Milanowski, A. & Miller, J. (2012). Measuring and promoting inter-rater agreement of teacher and principla performance ratings. Retrieved from website: files.eric.ed.gov/fulltext/ED532068.pdf

Hussin, F. and Ching, C. W. (2013). The contribution of economic sectors to economic growth: the cases of Malaysia and China. *International Journal of Academic Research in Economics and Management Sciences*, 2(2), 36-48.

Indrani, T. (2001). Agriculture and food security: development in Malaysia. In Education and Research Associations for Consumers. *Situation of agriculture in Malaysia a cause for concern*. Selangor: Education and Research Associations for Consumers, Malaysia.

Landers, R. N. (2011) Computing intraclass correlations (ICC) as estimates of interrater reliability in SPSS. Retrieved from website: neoacademic.com/2011/11/16/computing-intraclass-correlations-icc-as-estimates-of-interrater-reliability-in-spss/

Luo, P., Donaldson, J. A. and Zhang, Q. F. (2011). The transformation of China's Agriculture System and its impact on Southeast Asia. *International Journal of China Studies*, 2(2), 289-310.

Malla, R. (2014). Agricultural technologies for marginal farming systems in Asia: adoption and diffusion of SALT in the Philippines and SRI in India. Graduate Theses and Dissertations, Paper 14060.

Nin-Pratt, A. and McBride, L. (2014). Agricultural intensification in Ghana: evaluating the optimist's case for a Green revolution. *Food Policy*, 48, 153-167

Obansa, S. A. J. and Maduekwe, I. M. (2013). Agriculture financing and economic growth in Nigeria. *European Scientific Journal*, 9(1), 168-204.

Okezie, C. A. and Amir, B. H. (2011). Economic crossroads: the experiences of Nigeria and lessons from Malaysia. *Journal of development and Agricultural Economics*, 3(8), 368-378.

Pultrone, C. (2012). An overview of contract farming: legal issues and challenges. *Uniform Law review Revue De Droit Uniforme*, NS-Vol. XVII, 263-289.

Rebelo, L., Johnston, R., Karimi, P. and McCornick, P. G. (2014). Determining the dynamics of agricultural water use: cases from Asia and Africa. *Journal of Contemporary Water Research & Education*, 153(1), 79-90.

Ricker- Gilbert, J. Jumbe, C. and Chamberlin, J. (2014). How does population density influence agricultural intensification and productivity? Evidence from Malawi. *Food Policy*, 48, 114-128.

Sasson, A. (2012). Food security for Africa: an urgent global challenge. *Agriculture & Food Security*, 1(2), 1-16.

Smalley, R. (2013). *Plantations, contract farming and commercial farming areas in Africa: a comparative review*. Retrieved 5 October 2015, from http://www.fao.org/uploads/media/FAC_Working_Paper_055.pdf

Swinnen, J. F. M., van Herck, K. and Vranken, L. (2015). Agricultural productivity in transition economies. *Choices*, P2, P3, Q1.

Tatlidil, F. F. and Akturk, D. (2004). Comparative analysis of contract and non-contract farming model in tomato production. *Journal of Agronomy*, 3, 305-310.

Tilman, D., Cassman, K. G., Matson, P. A, Naylor, R. and Polasky, S. (2002). Agricultural sustainability and intensive production practices. *Nature*, 418, 617-677.

Wang, W., Wang, J. and Wang, Z. (2012). Prediction of the surplus rate of rural labor force in China from 2012 to 2050. *Modern Economy*, 3, 557-562.

Yusoff, N. (2015). The implementation of food production permanent park and farmers' income. *American International Journal of Research in Humanities, Arts and Social Sciences*, 3(11), 195-200.